Addendum to the Short Description of Figures

Figure 15 illustrates four implementations including a prior art business system with integrated transaction state, data, etc. supporting a business to business transaction protocol and three implementations with hosted private exchange providing the support for the business to business transaction protocol.

Figure 16 illustrates the states and messages for a closed loop Purchase Order (P.O.) to P.O. Invoice Payment process between a Buyer and Seller.

Figure 17 illustrates a web browser screen for a buyer using a hosted private exchange to implement the closed loop process of Figure 16.

Figure 18 illustrates a web browser screen for a seller using a hosted private exchange to implement the closed loop process of Figure 16.

Addendum to the Description

Insert after the last paragraph before the Description of a Preferred Embodiment

".....Some multi-site partners with multiple enterprise systems will create global RosettaNet systems to provide internal integration and external consistency. The RosettaNet systems are standard and may be hosted remote from the trading partners. This suggests that a service provider model may be successful and avoid the issues of the enterprise systems Application Service Provider model."

Figure 15 illustrates four implementations of systems supporting a business to business transaction protocol, including RosettaNet, where the transaction protocol provides business process states, state transitions, and message forms. The transaction messages are transmitted among the partners using a network 155, including the Internet.   The prior art implementation 154 provides a business system providing state transitions, message forms, transaction state and data. The present invention discloses a hosted private exchange that provides the transaction state, data, state transitions, and message forms such that a user with a web browser can fully participate in business to business transactions with other implementations that use the business to business transaction protocol.

Implementation 151 uses the hosted private exchange with a web browser. The Implementation 152 with a business system and the hosted private exchange

Ref 09/930,933   Information transfer protocol system and private exchange
N. K. Ouchi   Page 1 of 4

accessed with a web browser. A transaction is received using the web browser, the data from the transaction is entered manually into the business system, and the response from the business system is entered using the web browser as the response to the transaction.

The integration between the web browser viewed transaction data and the business system is developed incrementally using filters so that the well defined transactions are integrated first and the more complex or error prone transactions are processed manually. Since a large percentage of the transactions can be easily defined, these are integrated in a short period of time. Implementation 153 provides a business system and integration with the hosted private exchange where a filter passes the defined transactions to the business system for an automated response similar to capabilities of an integrated business system implementation 154. Transaction responses that are not defined are processed manually.

An organization using the present invention can progress from the web browser implementation 151, to the manual transactions between the web browser and business system implementation 152, to the filter, incrementally integrated business system implementation 153 more rapidly than the prior art integrated business system implementation 154. With the hosted private exchange, the organization is capable of fully participating in all transactions with trading partners using the business to business protocol starting with only a web browser. With wide use of a single business to business transaction protocol, each organization need only integrate their business system to that one protocol. Ease of implementation provides the protocol a significant advantage.

Figure 16 illustrates messages with data, the states and state transitions for a closed loop Purchase Order (P.O.) to Invoice business to business process between a Buyer and Seller. The Buyer initiates the process by sending a P.O. message to the Seller. There may be a set of messages between Seller and Buyer where there are changes in Date, Price, Quantity (Qty). When there is agreement, the agreeing partner sends a P.O. Accept message. When the Seller is preparing to ship the items in the P.O., the Seller sends an Advance

Ship Notice describing the items ship for the P.O. The Advance Ship Notice may include barcodes or other machine readable item identifiers so that as the items are received, the process to notify the Seller that the items have been received is automated. The physical items are shipped to the Buyer. The physical items are received by the Buyer and notification to the Seller is sent. Seller sends the Invoice for the P.O. and the Buyer sends payment for the P.O. Figure 17 illustrates a screen from a web browser accessing a hosted private exchange for a buyer for Partner R. The Inbound Purchase Order Tasks are in the state where Partner R must respond with either an Accept or changes. The Link field is used to access the details of the P.O. The Purchase Order Tasks Sent are P.O. that are waiting response from the seller. Accepted Purchase Orders are P.O. that are waiting for the Advance Ship Notice from the seller. Shipments to Receive are P.O. items that have been shipped and waiting to be received by the buyer. Invoices to Receive are Invoices that are to be paid by the buyer. Paid Invoices are completed purchase orders that have been paid. Create Purchase Orders link provides a screen to initiate a Purchase Order. Mange Partner List link provides a screen to create a business to business protocol relationship with a new partner.

Figure 18 illustrates a screen from a web browser accessing a hosted private exchange for a seller for Partner S. The screen provides the seller states corresponding to the buyer states where messages from Partner R require response from Partner S such that the closed loop business process of Figure 16 can be implemented.

The web browser screens illustrated in Figures 17 and 18 may be used in conjunction with a business system where information is manually transferred between the web browser and the business system. The hosted private exchange provides filters to selectively integrate defined transactions to the business system so that routine transactions are automated and exception transactions still processed manually. Over a short period of time, the majority of the transactions are integrated. This is in contrast to the prior art implementation that requires that all transactions including the exceptions be

Ref 09/930,933   Information transfer protocol system and private exchange
N. K. Ouchi   Page 3 of 4

defined to develop the adapter for the business system so that it can participate in the business to business protocol.

"Description of a Preferred Embodiment
RosettaNet System
A RosettaNet system 70, illustrated in FIG. 13, consists of an Application Server 131, a Web Server 130, a Data Base Server 133, and a RosettaNet Business-to-business Server 132. These servers are software programs that execute on server hardware such as a PC from Dell or Compaq, a workstation or network server from SUN or Hewlett Packard, or a mainframe computer from IBM. ......"

Ref 09/930,933   Information transfer protocol system and private exchange
N. K. Ouchi   Page 4 of 4